

PREVENT STORM WATER CONTAMINATION Best Management Practices for

Section X - Printing and Publishing Facilities



SIC Codes: 2711 - 2796

General Information:

1) Federal and State Storm Water regulations require the City to reduce the quantity of pollutants that enter our storm drains, rivers, and washes from rain water and other sources. 2) Water from any source that contains contaminants is prohibited from entering the storm drain system which includes streets, pipes, catch basins (street grates), ditches, washes, parks, and rivers. 3) Commercial and industrial wash or wastewater is prohibited from entering the storm drain system, street or any other outside area. 4) All washing activities that use soap, solvents, degreasers or any other chemical must be hauled to a landfill or discharged into the sanitary sewer through a sand/oil interceptor or approved pretreatment device. 5) City Code 32C requires any person or business that has a "potential" to pollute storm water, to develop and implement a Storm Water Management Plan (SWMP). 6) The BMPs listed here are not inclusive, and must be tailored for your facility. See 40CFR122 Section 6.X.3, October 30, 2000 for additional required BMPs.

Plate preparation

 Use aqueous-developed lithographic plates or wipe-on plates.

Printing

- ◆ Use press wipes as long as possible before discarding or laundering; dirty ones for the first pass, clean ones for the second pass.
- ◆ Squeeze or centrifuge solvent out of dirty rags.
- ◆ Set up an in-house dirty rag cleaning operation, if warranted, or send to approved industrial laundries, if available.
- ◆ Dedicate presses that use inks with hazardous pigments or solvents.
- ◆ Segregate used oil from solvents or other materials.
- Use water-based inks in gravure and flexographic printing process.

Cleanup

- ◆ Label sinks as to proper disposal of liquids.
- ◆ Keep equipment in good condition.
- Use doctor blades and squeegees to remove as much ink as possible prior to cleaning with solvent and rags.
- ◆ Control solvent use during equipment cleaning, use only what you need.
- ◆ Designate special areas for draining or replacing fluids.
- ◆ Substitute nontoxic or less toxic cleaning solvents.
- Recover waste solvents on-site with batch distillation, if warranted, or use professional solvent recyclers.

Cleanup (Continued)

- ◆ Centralized liquid solvent cleaning in one location.
- ◆ Institute employee refresher courses in operating and safety procedures.

Stencil preparation for screen printing

 Recapture excess ink from silkscreen process before washing the screen to decrease amount of ink and cleaning emulsion used.

Material handling and storage areas

- Store containerized materials (fuel, paints, inks, solvents, etc.) in a protected, secure location and away from drains.
- ◆ Store reactive, ignitable or flammable liquids in compliance with the local fire code.
- ◆ Identify potentially hazardous materials, their characteristics and use.
- ◆ Eliminate/reduce exposure to storm water.
- Control excessive purchasing, storage and handling of potentially hazardous materials.
- Keep records to identify quantity, receipt date, service life, users and disposal routes.
- Secure and carefully monitor hazardous materials to prevent theft, vandalism and misuse of materials.
- ◆ Educate personnel for proper storage, use, cleanup and disposal of materials.
- ◆ Maintain good integrity of all storage tanks.
- Inspect storage tanks to detect potential leaks and perform preventive maintenance.

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Continued

Material handling and storage (Continued)

- ◆ Provide sufficient containment for outdoor storage areas for the larger of either 10% of the volume of all containers or 110% of the volume of the largest tank.
- Use temporary containment, such as portable drip pans, where required.
- Use spill troughs for drums with taps.
- ◆ Train employees on proper filling and transfer procedures.
- ◆ Inspect piping systems (pipes, pumps, flanges, couplings, hoses and valves) for failures or leaks.
- ◆ Handle solvents in designated areas away from drains, ditches and surface waters.
- Locate designated areas preferably indoors or under a shed.

Training

- All employees should be trained in the following areas at least once per year.
 - ◆ Spill response
 - ◆ Good housekeeping
 - Material management practices
 - ◆ Procedures for equipment and container washing.

Inspections

- ◆ Conduct routine quarterly storm water inspections and during wet weather within 24 hours of the event.
- ◆ Complete the BMP checklist during each inspection.

Inspections (Continued)

- ◆ All structural and non-structural BMPs.
- ◆ All areas exposed to precipitation will be visually inspected for evidence of or the potential for pollutants entering the storm drain system.
- ◆ Structural BMPs (berms and dikes) will be inspected to ensure they are operating correctly.

Storm Water Management Plan (SWMP) or Storm Water Pollution Prevention Plan (SWPPP)

- ◆ Develop and implement a SWMP or SWPPP.
- ◆ All Storm Water Plans (SWMP or SWPPP) must be submitted to the city for approval.
- ◆ SIC codes in this class must submit an industrial Notice of Intent (NOI) to ADEQ.

If spills occur:

- ◆ Stop the source of the spill immediately.
- ◆ Contain the liquid until cleanup is complete.
- ◆ Deploy oil containment booms if the spill may reach water or a storm drain.
- ◆ Cover the spill with absorbent material.
- Keep the area well ventilated.
- **◆** Dispose of clean-up materials properly.
- ◆ Do not use emulsifier or dispersant.

The BMPs found on this page are paraphrased from Federal Storm Water documents 40CFR122, 1995 or later.

Storm Water



Only Rain in the Storm Drain!

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STREET TRANSPORTATION DEPARTMENT STORM WATER MANAGEMENT SECTION